# **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PE606 International application No. PCT/IB 03/04139			FOR FURTHER ACTION  See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)					
			International filing date 18.09.2003	(day/month/year)	Priority date (day/month/year) 19.09.2002			
E02	2D29/02	atent Classification (IPC) o	both national classification a	and IPC				
	Applicant OFFICINE MACCAFERRI S.P.A. et al.							
1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.							
2.	This RE	PORT consists of a total	of 4 sheets, including the	nis cover sheet.				
	This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).							
	These annexes consist of a total of 2 sheets.							
3.	This rep	ort contains indications	relating to the following it	ems:				
	ı 🛛	Basis of the opinion						
					•			
	111 🗆	•	of opinion with regard to n	oveltv. inventive st	ep and industrial applicability			
			· ·	opinion with regard to novelty, inventive step and industrial applicability				
IV ☐ Lack of unity of invention  V ☐ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial approximations and explanations supporting such statement			y, inventive step or industrial applicability;					
	VI 🗆	Certain documents	eited					
	VII 🗆	Certain defects in th	e international application					
	VIII □	Certain observations	on the international appl	ication				
Date	Date of submission of the demand			Date of completion	of this report			
13.04.2004				08.10.2004				
		ing address of the internati	onal	Authorized Officer	net Paten.			
preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465			3656 epmu d	Geiger, H Telephone No. +49	1 89 2399-2962			

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I.	<b>Basis</b>	of the	report
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1. With regard to the **elements** of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):

	Des	scription, Pages								
	1-5		as originally filed							
	Cla	laims, Numbers								
	1-1	•	received on 10.04.0004 with latter of 10.04.0004							
	1-1	O	received on 19.04.2004 with letter of 13.04.2004							
	Dra	rawings, Sheets								
	1/2-	2/2	as originally filed							
2.	Witl lanç	rage, all the elements marked above were available or furnished to this Authority in the ternational application was filed, unless otherwise indicated under this item.								
	The	ese elements were av	railable or furnished to this Authority in the following language: , which is:							
		the language of a tra	anslation furnished for the purposes of the international search (under Rule 23.1(b)).							
		the language of pub	lication of the international application (under Rule 48.3(b)).							
		the language of a tra Rule 55.2 and/or 55.	anslation furnished for the purposes of international preliminary examination (under 3).							
3. With regard to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:										
		contained in the inte	rnational application in written form.							
		filed together with th	e international application in computer readable form.							
		furnished subsequently to this Authority in written form.								
		furnished subsequently to this Authority in computer readable form.								
		The statement that t in the international a	he subsequently furnished written sequence listing does not go beyond the disclosure application as filed has been furnished.							
		The statement that t listing has been furn	he information recorded in computer readable form is identical to the written sequence ished.							
1.	The	amendments have r	esulted in the cancellation of:							
		the description,	pages:							
		the claims,	Nos.:							
		the drawings,	sheets:							

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5. 🗆	This report has been established as if (some of) the amendments had not been made, since they have
	been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: No:

Yes: Claims

Inventive step (IS)

Yes: 0

No:

Claims Claims

Claims

1-10

1-10

Industrial applicability (IA)

Yes: Claims

1-10

No: Claims

2. Citations and explanations

see separate sheet

## INTERNATIONAL PRELIMINARY

International application No. PCT/IB 03/04139

**EXAMINATION REPORT - SEPARATE SHEET** 

#### Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

#### 1. State of the art

1.1 The following documents are considered relevant:

**D1**: WO 96 17134 A

D2: WO 00 31350 A

**D3**: WO 96 33314 A

**D4**: DE 44 09 538 A

1.2 D1 is considered the most pertinent state of the art document.

#### 2. Inventive Step - Article 33(3) PCT

- 2.1 The international application does not comply with Rule 33(3) PCT because the subject-matter of claim 1 does not involve an inventive step.
- 2.2 The subject matter of claim 1 differs from the disclosure of **D1** (cf. page 9, paragraph 3; page 15, paragraph 4; figs. 1, 4, 5) only in that
  - (a) a lower wall and an upper wall each comprising at least one panel of double-twist hexagonal-mesh wire netting.
- 2.3 This feature, however, is merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to provide an alternate retaining wall construction.
- 2.4 The subject matter of claim 1 would also not appear to involve an inventive step with respect to the disclosure of **D2** to **D3**.

### 2.5 re dependent claims 2-10

2.6 The above dependent claims do not contain any additional features which involve an inventive step by themselves. These additional features are rendered obvious by the cited prior art. Otherwise, the skilled man would employ them, if required, on the basis of his expert knowledge and without demonstrating an inventive step.

Thus, even a combination of the features set out in these claims with the features of any independent claim would not lead to subject-matter involving an inventive step.

### 3. Industrial Applicability - Article 33(4) PCT

3.1 The subject matter of all claims is industrially applicable.

#### 4. Certain observations on the international application:

4.1 Although directed to an apparatus, claim 7 comprises features describing a method step to its production (" ... connection ... is factory-made, the element being stowed and/ or transported to the place of use ... front wall is placed on the lower wall...") rather than a structural detail of the claimed apparatus, thus rendering the subject matter of this claim unclear.

The same objection applies to claims 8 and 9.

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### CLAIMS

- 1. An improved element for forming ground covering, restraining and reinforcing structures, comprising a front wall (F), a lower wall (L) and an upper wall (U), characterised in that the front wall (F) is connected in an articulated manner at one of its end edges (3, 4) at least, to an edge of the lower wall (L) or the upper wall (U).
- 2. An improved element as claimed in claim 1, characterised in that the front wall (F) is connected in an articulated manner at two of its opposite end edges (3, 4) to an edge of the lower wall (L) and an edge of the upper wall (U) respectively.
- 3. An improved element as claimed in claim 1 or 2, characterised in that the upper wall (U) has a height substantially corresponding to or lower than the height of the front wall (F).
- 4. An improved element as claimed in one of claims 1 to 3, characterised in that it comprises bracket means (8) adapted to support, in use, the front wall (F) in an inclined configuration with respect to the lower wall (L).
- 5. An improved element as claimed in claim 4, characterised in that the bracket means comprise at least one triangular bracket (8) with a side secured in an articulated manner to the front wall (F).
- 6. An improved element as claimed in any one of the preceding claims, characterised in that a layer of geosynthetic material or bio-matting is secured to the front wall.
- 7. An improved element as claimed in any one of the preceding claims, characterised in that the front wall (F) comprises at



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least one panel (2) of electrically welded wire netting, the lower (L) and upper (U) wills each comprising at least one panel (5, 6, 6a, 6b) of double-twist hexagonal-mesh wire netting.

- 8. An improved element as claimed in any one of the preceding claims, characterised in that the articulated connection of the front wall (F) to the lower wall (L) and/or the upper wall (U) is factory-made, the element being stowed and/or transported to the place of use in a flat configuration in which the front wall (F) is placed on the lower wall (L) and/or the upper wall (U).
- 9. An improved element as claimed in claim 8, characterised in that the front wall (F) is connected is an articulated manner to both the lower wall (L) and the upper wall (U), the element (1) being stowed and/or transported to the place of use in a flat configuration in which the front wall (F) and the upper wall (U) are both placed on the lower wall (L).
- 10. An improved element as claimed in claim 8, characterised in that the front wall (F) is connected in an articulated manner to both the lower wall (L) and the upper wall (U), the element (1) being stowed and/or transported to the place of use in a flat configuration in which the front wall (F), the upper wall (U) and the lower wall (L) are folded and placed at least partially on top of one another in a zigzag configuration.
- 11. An improved element as claimed in any one of the preceding claims, characterised in that the upper wall (U) comprises at least two panels (6a, 6b) connected in an articulated manner along a common edge (20) substantially parallel to the edges of the front wall (F).

